White Paper

Category: Upland Agricultural Best Management Practices (BMPs) Eligibility

Issue: Should BMPs designed to protect water quality but which are not in the riparian zone be eligible to receive grant funds? If so, what types of BMPs and which locations should be eligible for funding?

Background:

Upland BMPs are often defined as those practices within a watershed that are not directly related to protecting the stream corridor but, when implemented, can reduce polluted run-off and protect water quality.

Currently only riparian BMPs are eligible for funding. Riparian BMPs are non-point practices associated with moving land-use activities back from the bank of the river/stream and restoring some ecological function to the riparian corridor.

The current rule states that centennial funds may only be used for "implementation of best management practices in the riparian zone on private property consisting of revegetation or fence construction and where a public easement is given by the landowner." -- WAC 173-95A-060 (8)(C)

Types of upland BMPs that are designed to reduce non-point source pollution and improve water quality in streams and rivers are:

- *Contour Buffer Strips* -- Narrow strips of permanent, herbaceous cover established across the slope of a field and alternated down the slope.
- *Field Stripcropping* – Growing crops in a systematic arrangement of strips or bands across the general slope to reduce water erosion.
- *Direct Seeding* -- Crop is seeded directly into vegetation cover or crop residue with little disturbance of the surface soil
- *Grassed Waterways* -- An area of concentrated surface flow such as a gully or ephemeral valley that is planted to permanent grass cover.
- *Heavy Use Area Protection* -- Protecting areas heavily used by livestock by establishing vegetative cover or by surfacing with suitable materials such as rock.
- *Sediment Basins* – A basin constructed at the edge of a field designed to collect and store sediment run-off

- *Roof Run-off Management* - A method for controlling and disposing of run-off water from roofs of barns and livestock feeding structures.

- *Range/Upland planting (seeding)* -- Establishment of adapted perennial vegetation such as grasses, forbs, legumes, shrubs and trees to reduce erosion and sediment yield.

- *Range Management* – designing and implementing a livestock grazing strategy that protects water quality. This often includes cross-fencing to more effectively manage grazing activity and stubble height.

- *Filter Strips (non-riparian)* – A strip or area of vegetation for removing sediment, organic matter, and other pollutants from runoff and wastewater.

Recommendations-

1. Fund limited riparian associated upland practices -- Upland practices may be funded that are part of a larger riparian buffer project. These BMPs should be limited to the following:

- Grassed waterways
- Heavy Use Area Protection
- Roof Run-Off Management
- Filter Strips
- Upland planting

The BMPs can only be funded when they are in direct contact or closely associated with a riparian protection project (needs to be defined). The riparian protection and upland BMPs must meet NRCS specifications.

This will allow for the funding of most of the components of an entire riparian BMP project.

2. Provide limited direct seed cost-share -- Direct seed (one-pass systems) cost-share may be provided for equipment rental on highly erodible land (HEL) or other critical areas up to _____ acres per producer and for no more than ___ years.

This will help remove some of the risk for producers who wish to try direct seed systems.

Pro's of making limited upland BMPs eligible for funding:

Upland source of non-point pollution are a major water quality problem in agricultural watersheds. It is going to require we take more of a watershed or holistic approach to

planning and implementation to significantly reduce the impacts of non-point source pollution.

Riparian BMP projects often include some upland components. For instance, a project to move winter feeding off the stream usually includes heavy use protection and roof run-off management to reduce mud and water in the feeding areas. In turn, this decreases the potential for contaminated run-off. As another example, a stream where a riparian buffer is installed could also benefit if the connected ephemeral valleys are planted to grass. This will significantly reduce the delivery of sediment during storm events.

Soil erosion from agricultural areas is a major problem throughout eastern Washington. Many streams and rivers run dark brown with soil eroded from fields. Upland BMPs can significantly reduce erosion and sedimentation. For instance, some research has suggested that sediment leaving the field can be reduced by 95% or more by using direct seed technology.

Con's of making limited upland BMPs eligible for funding:

We have limited funds for non-point implementation. Riparian areas are the biggest water quality bang-for-the-buck and are therefore the biggest priority. Any upland BMP we fund may translate to less funds available for protecting and improving stream corridors.

Final Recommendations-

New language suggested:

Implementation of best management practices in the riparian zone on private property consisting of revegetation, fence construction, and other water quality BMPs as approved by the Department, and where a public easement or landowner agreement is given by the landowner.